

Leica

PHOTOGRAPHY





Leica

PHOTOGRAPHY®

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COVER

David Falconer

A wilderness hike in the Cascade Mountains of Washington provided Falconer with this photo of his daughter, Elizabeth. She made the fifty-mile foot trip with her parents and members of the Sierra Club. Leica M2, 35mm Summicron at f/3.5, 1/50th on Kodachrome II with Skylight filter.

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The editors are happy to consider original articles on photography with the Leica and photographs taken with Leica cameras and lenses. All manuscripts and photographs should be accompanied by stamped, self-addressed return labels.

◀ INSIDE COVER

Julius Foris, Jr.

Things are vernal all over, about this time of year. Photographer Foris caught Nature imitating Nature with an M3 and 135mm Elmarit at f/8, 1/250th.

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show place

MARK COHEN, student

While studying mathematics at Pennsylvania State University and then at Wilkes College, twenty-one-year-old Mark Cohen has found himself given over to photography.

His interest was aroused in 1955, when at the age of twelve he watched his uncle process prints in a cellar darkroom. At that time, he began learning the technical side of photography, and, using simple

equipment, he started to develop his darkroom skills. In 1957, he was able to borrow a Leica IIIIf body with an assortment of lenses. He feels that acquiring fine equipment at that time provided the incentive for him to approach photography more seriously, since he was no longer restricted by the limitations of inferior equipment. He learned through experimentation, and, finding more satisfaction in his







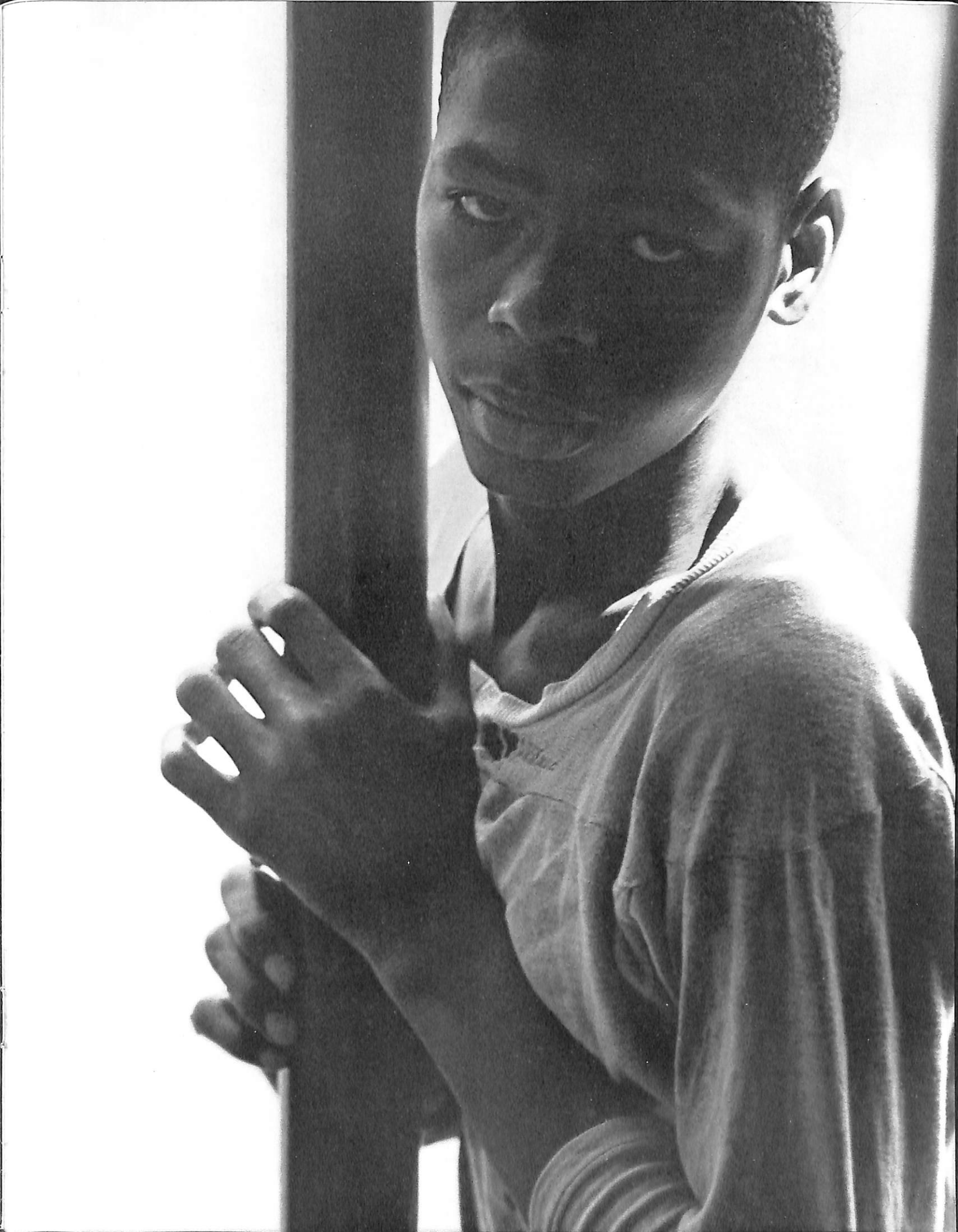








photo work, started using a Leica M3 with a 50mm Summicron lens.

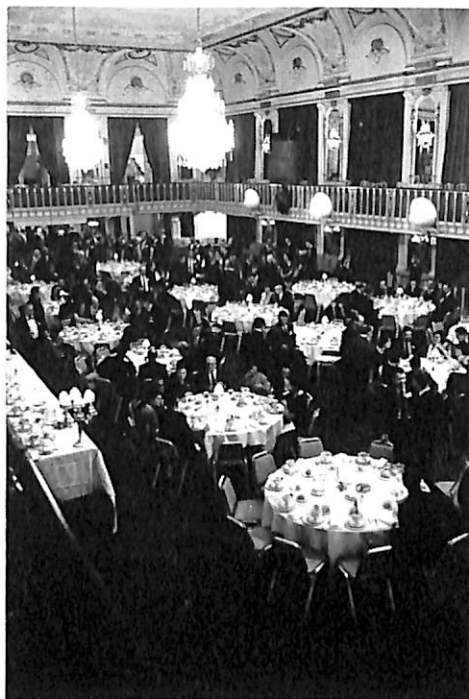
Entering Penn State in 1960, Mark practically filled the 1963 Yearbook with his pictures, in addition to producing many winners in Photography Club competitions. His work in mathematics diminished proportionately as his interest and skill in photography expanded.

Cohen's aim is to develop a critical sensitivity

that, while satisfying himself, will be understood by others. Sometimes in conversation he speaks of a loneliness in his subjects — then later he mentions the gaiety of light on blades of grass. His favorite subjects often express moods of solitude and isolation, but the delicate forms of nature are a pleasant side of life for him — things that are beautiful to look at, without the marks of pain or sorrow on them.

Chester Perkowski

focusing on...



file prints

Here's a good idea from the Leica Technical Center about how to identify file prints of your negatives. The 35mm negative carriers for the Valoy and Focomat enlargers have a slot through which the frame number of the film is projected onto the baseboard when enlargements are made. A red plastic filter permits the frame number to be projected and read, but prevents it from printing, since it is normally unwanted on the print. By removing the filter, you can print the frame number on the edge of the file prints (see illustration) for future reference. For regular printing, slip the filter back into the slot.

European flight.

Lufthansa German Airlines reports that a number of people have already signed up for their "Europe Through Your Leica" tour which will leave the U.S. next July 22nd.

The three-week tour will include stops at many historic and scenic locations in Europe and will feature a visit to the Leitz factory where Leica owners may chat with factory experts.



Information on the "Europe Through Your Leica" tour is available from Lufthansa German Airlines, 410 Park Avenue, Dept. BV, New York, N. Y.

color courses

Helen C. Manzer, FPSA, ARPS, the widely-known color photographer, teacher, judge, exhibitor and lecturer, will again offer courses in color photography this summer and fall.

There will be three courses offered on California's Monterey Peninsula: First group from May 23 to June 4; second group from June 13 to June 24; third group from June 27 to July 9. Further information about these West Coast courses is available from Miss Barbara J. Gurley, P.O. Box 3483, Carmel, California 93921.

The East Coast courses will be held in the famous Lakes Region of New Hampshire. The first course is from July 26 to August 6; second course, August 9 to August 20. Two special courses featuring fall foliage coloring are also offered. First of these courses is from September 26 to October 1 and the second from October 3 to October 8. For more information about the New Hampshire courses, write to Ruth L. Wiesen, P. O. Box 245, Laconia, New Hampshire 03246.

Leica Fotografie

Have you seen the English-language edition of "Leica Fotografie"? It's a beautiful European bi-monthly magazine filled with valuable Leica lore and pictures.

The current issue of Leica Fotografie (No. 2, 1965) reports in depth on the new Leicaflex and includes comments by leading European photographers who have used the camera in the field. If your Leica dealer does not have a copy, write directly to E. Leitz, Inc., 468 Park Avenue South, New York, N. Y. 10016. Price is \$0.75 a copy with your order.

Subscriptions for Leica Fotografie for the U.S. and its possessions are also available from E. Leitz, Inc. as follows: one year, \$4.50; two years, \$8.25; three years, \$12.00. Check or money order should accompany your order.



AND NOW, THE LEICAFLEX! / Bob Schwalberg

single-lens reflex camera announced

Offering traditional Leitz precision and ease of operation, the new Leicaflex is a no-nonsense camera which brings Leica quality, ruggedness and reliability to the 35mm single-lens reflex field. Built for results, the Leicaflex is the cornerstone of a new Leitz reflex camera system that will be developed to parallel (*but not replace*) the Leica-M range-viewfinder system from which it has inherited many of its sturdily dependable ways.

The Leicaflex is manufactured to tight, Leica-standard tolerances. It features a new family of auto-aperture lenses, a new instant-return mirror mechanism, new extra-bright viewfinder optics, a new built-in cadmium sulphide exposure meter, and a new focal-plane shutter that stops action cold at

1/2000 sec. and synchronizes with electronic flash at 1/100th sec. And, it is quiet!

One of the first things that you'll notice about the Leicaflex (once having become acquainted with its bright focusing screen and smooth, precise mechanical functions) is its quietness. There's none of the usual reflex crash-bang.

human engineering

Designed by engineers who are also active photographers, for active photographers who are *not* engineers, the Leicaflex presents a comfortable handful of readily accessible, logically located, easy-to-operate controls with big, legible markings. Film-transport, shutter-release and speed selection are

LEICA M 3 AND LEICAFLEX are similar in both size and weight when M 3 is equipped with its meter. Leicaflex body is deeper than M 3.





SHUTTER RELEASE, film transport and speed dial are grouped.

grouped together in a single coaxial assembly at the right-hand side of the top deck. The single-stroke advance lever snaps out to a comfortable ready position, well clear of the viewfinder eyepiece to permit left-eye use. Your right-hand thumb and forefinger fall naturally over these controls while your left hand engages the lens. Whichever eye you put to the extra-large eyepiece lens (it gives even eyeglass wearers a comfortable view of the whole field), the Leicaflex "fits" like a pair of well-worn gloves.

Speaking of gloves, the Leicaflex auto-aperture lenses can be manipulated while wearing them, if need be. All have the auto-aperture preselector ring at the base, right next to the camera body. And, in all cases, the focusing ring is at the front where you can grab it without worrying about upsetting the exposure. Learn to handle any one of these anodized beauties, and you've learned to handle all of them. The large, non-rotating speed selector dial has firm click-stops for speeds from 1 to 1/2000th sec., plus Bulb. A speed scale is also visible through the viewfinder, just underneath the picture-field. This lets you change speeds in mid-picture, so to speak, without taking your eye from the finder.

This feature also speeds up operation of the built-in exposure meter that lets you set the correct exposure as soon as the Leicaflex reaches its eye-level operating position. (We'll describe the meter in detail a bit later.)

focusing and viewing

The instant-return mirror and auto-aperture lenses keep the picture before your eye except for the instant of exposure. There's no visible mirror black-out,

or aperture dim-out with the Leicaflex except at the instant of exposure. Computed in relation to the specially developed reflex-focusing Leicaflex lenses, the finder system works with all lenses at full aperture to provide maximum brightness.

A circular patch containing more than 13,000 tiny micro-prisms is centered in the unusually bright viewing screen. These precision surfaces make focusing fast and easy by deflecting out-of-focus light rays to exaggerate the visual difference between correctly and incorrectly focused objects. The prismatic effect is so pronounced that a second contour is found around the edges of out-of-focus objects, and a watery pattern is seen until the lens is in focus. When the center spot is clear, the image is sharp.

Fast, accurate focusing is enhanced by the camera's high screen-brilliance and the telescope power, or viewfinder magnification, of the system. This depends on the focal length of the lens being used and is almost 1:1 with the standard 50mm Summicron-R f/2 lens. Here are the finder magnifications provided by the four introductory Leicaflex lenses:

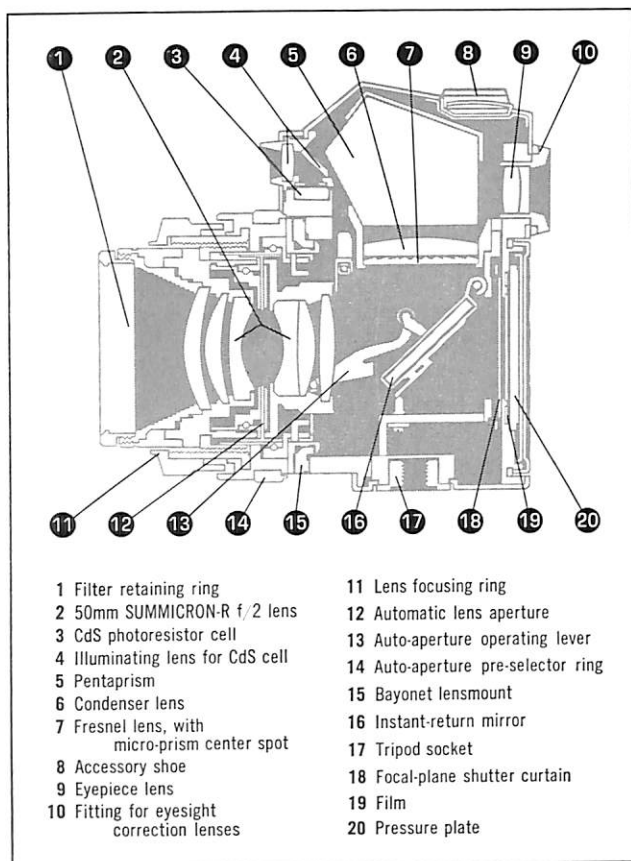
<i>Focal Length</i>	<i>Finder Magnification</i>
35mm	0.6 X
50mm	0.9 X
90mm	1.5 X
135mm	2.3 X

In addition to giving a parallax-free image with all lenses, and at all distances, the Leicaflex viewing screen is precision-adjusted in relation to the film-gate. The viewing screen shows a 23 x 35mm image (in accordance with the international standard for color film slide mounts), while the actual film dimensions are 1/2 mm more in all four directions. Viewfinder center and picture center correspond exactly.

steady as she goes!

The loss of image sharpness through mirror vibration, one of the most-discussed SLR bugaboos, has been virtually eliminated by the Leitz-patented mirror mechanism of the Leicaflex. In fact, tests made with a high-power microscope prove conclusively that the vibration of the Leicaflex mirror is only negligibly more than vibration in the Leica-M camera. And, since the Leica-M shutter is famous for its unbeatable smoothness, this took some doing!

This has been achieved by a system of levers which starts the mirror from a dead-point, accelerates it to a maximum swinging speed in the center of its motion, and then brings it to a second dead-point stop without banging into the top-plate of the camera housing.



Another interesting aspect of this design is that the auto-aperture actuator arm is connected directly to the mirror-raising mechanism; both derive their energy from the same springs. This guarantees that the Leicaflex lens is always fully closed down to the preselected aperture before the shutter can begin to travel. By linking the two preliminary functions of mirror-raising and aperture-closing together, an often-overlooked source of SLR vibration has been eliminated in the Leicaflex. The action of the Leicaflex mirror, auto-aperture, and shutter-braking mechanisms eliminates any appreciable camera vibration, permitting confident use of even the slowest shutter speeds.

In photomicrography and high-magnification macro photography, however, all vibration, no matter how insignificant, is magnified in direct proportion to the image magnification. For these special appli-

cations, the Leicaflex has a mirror-control lever which permits the mirror to be raised separately, before the shutter is released.

fast, quiet, and efficient

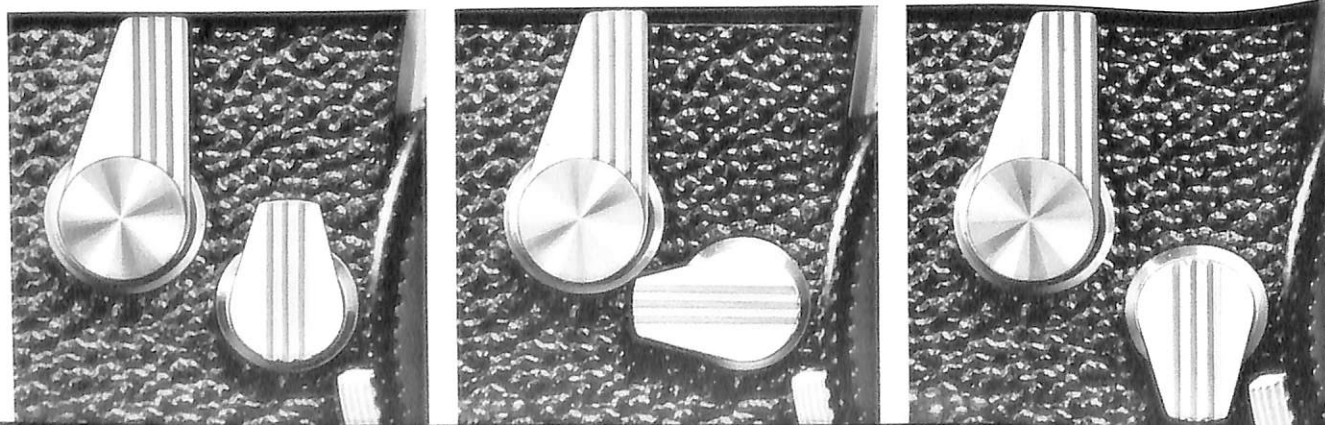
The Leicaflex focal-plane shutter is a new design. Its increased curtain velocity permits a top speed of 1/2000th sec., and (even more important) the shutter synchronizes electronic-flash units at 1/100th sec. Automatic compensation for acceleration is provided by a Leica-type design in which the moving slit widens itself as it crosses the film gate. This ensures uniform exposures over the whole film area, even at the top speed of 1/2000th sec. The higher curtain velocity also increases the camera's optical efficiency since the moving slits for speeds are proportionately wider. Speeds are arranged in geometrically doubling progression from 1 to 1/2000th sec., plus Bulb. Firm click-stops are provided at each marked speed. As previously mentioned, the speed setting is also visible through the viewfinder, on a scale appearing directly underneath the picture-field. Intermediate exposure times can be set over the full range, when desired, except between 1/8th and 1/4th sec.

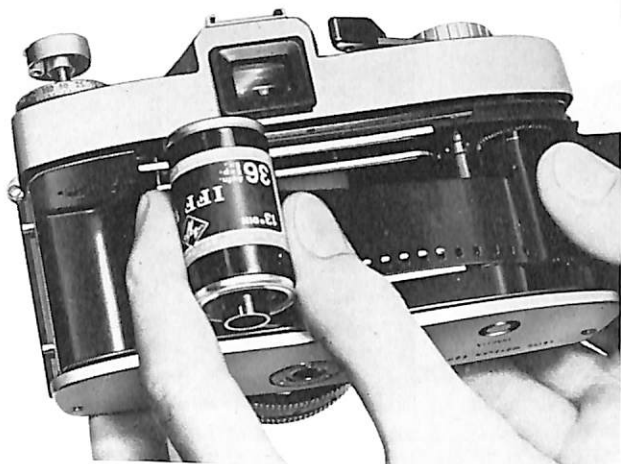
Two separate flash circuits, each with its own standard P-C polarized, marked contact, are provided for speedlight units as well as conventional flash-bulbs. Electronic-flash synchronization is available up to 1/100th sec., this setting being indicated by a lightning-bolt on the speed selector dial. Standard medium-peak (Class M) lamps can be synchronized at all speeds. Guide-numbers, however, become unprofitably low at speeds in excess of 1/250th sec., so most photographers prefer a setting of 1/125th sec. Small zirconium-filled flash lamps of the AG-1 type must be synchronized at speeds no higher than 1/60th sec. because of their different ignition characteristics. Flash-wise, the Leicaflex is ready to go with anything that glows!

easy loading

The design of the Leicaflex body, since it is deep

MIRROR CONTROL permits choice of instant-return action or lifting mirror and keeping it out of light path before or after exposure.





HINGED BACK permits fast loading, visible check on film seating.

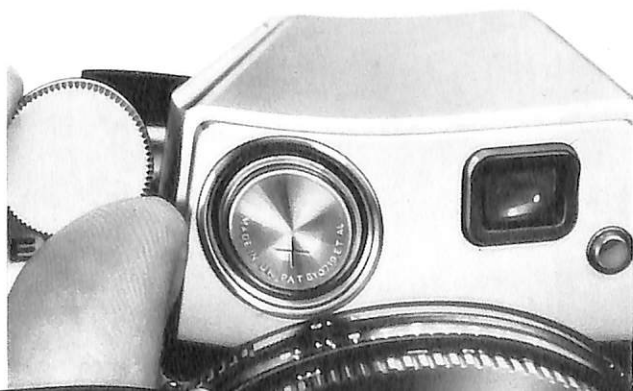
and rugged enough to house the prism-and-mirror system, permits the use of a hinged back which swings wide open. This offers easy loading and a quick, positive, visual check that all is in order before locking up to begin shooting. Once the film leader has been pushed into any of three slots, equally spaced on the core of the permanently mounted take-up spool, you are ready to close the camera and crank the first frame into place. And when you've finished the last exposure, a built-in rewind crank stands ready to whisk the film back into its cartridge for a quick change to a new roll.

sensitive, accurate, and handy

The built-in Leicaflex exposure meter utilizes a battery-powered cadmium-sulphide photoresistor cell. The battery is the button-sized PX-625 (with white ring). Its useful life is between one and two years and it is recommended for use in the Leicaflex even at well-below-freezing temperatures — to 14°F. to be precise. Film-speed indexes are provided from ASA 8 to an optimistic 6,500 on a dial which is coupled to the meter's follower arm. A locking button positively prevents accidental upsetting of the speed index, eliminating one of the most troublesome problems of exposure-metermanship. The meter's sensitivity ranges from approximately 0.2 to 1500 candles-per-square-foot, or from weak reading illumination to blinding equatorial sunlight.

When you look through the Leicaflex finder you see the meter needle and a circle-topped follower-arm at the right-hand side of the viewing screen. Match

METER BATTERY needs replacement only once in 18 months or so.



the needles and you've set the correct exposure. Since the meter follower-arm is cross-coupled with the shutter-speed selector dial and the auto-aperture rings of all the Leicaflex lenses, either can be turned to adjust the exposure. In practice, however, it is

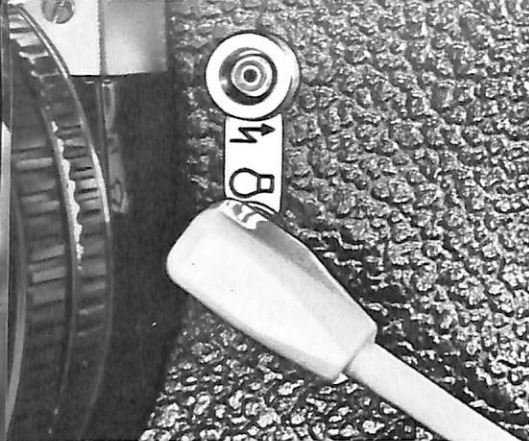
FINDER SCREEN shows focusing spot, speed scale, meter needles.



ALIGNED meter indicators, sharp image, show camera is set to go.

probably preferable to start by setting the shutter speed, then obtain the correct exposure by turning the auto-aperture ring until the follower-arm circle surrounds the tip of the meter needle.

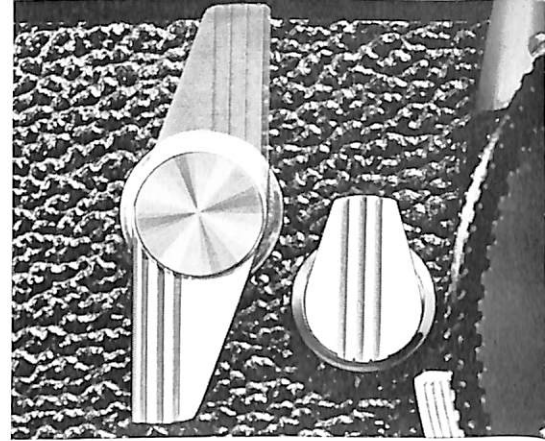
If your shutter speed is too high or too low for the anticipated subject motion, the speed scale in the finder lets you change this without taking the camera from your eye. Two circles engraved on the focusing screen, a large one in the upper-right-hand corner, and a small one below at the right-hand corner, let you know if you're opening-up or closing-down the



P-C CONTACTS for "M" and "X" flash synch are on front of body.



LENS LOCKING and release action of Leicaflex is similar to that used on the Leica M 3.



THE SELF-TIMER of Leicaflex is released by pressing the shutter release button.

lens. When the follower-arm moves toward the large circle, the aperture is increasing, and vice-versa. My own method for "reading" the aperture without taking my eye from the Leicaflex finder is quite simple.

I've found that it takes only a few seconds to turn the auto-aperture ring of the lens all the way to the right (thus opening the lens to full aperture) and then to count the clicks as you come down the scale to match the meter needles. Since all auto-aperture Leicaflex lenses work in exactly the same way, all you have to remember is that each click is worth exactly half an f/stop.

The rectangular measuring field of the Leicaflex meter corresponds to the field of the 90mm lens. Because of the relatively narrow 27° acceptance angle, the meter gives accurate exposures when the most important part of the subject is covered by the focusing spot in the center of the Leicaflex viewing screen.

For the technically curious, I might add that the meter's measuring field, when used with a 35mm lens, is a small rectangle just surrounding the focusing circle. With the 50mm lens, the field is a rectangle occupying about half the finder field, with the same center. The meter's field is about 50% larger than that produced by the 135mm lens.

The beauty of this precise, built-in CdS meter is that it's cross-coupled in such a way that it in no way interferes with, or changes, normal camera-handling. When you want it, it's there. You can line the needles up in less time than it took to read this sentence. When you don't need its advice, go your way: All

shutter-speeds and lens-apertures can be used regardless of the film-speed index set into the meter.

More than this, it's one of the most accurate and dependable meters I've ever tested, and one that's always right there in front of you every time you take a picture. With its pointers permanently imaged inside the finder field, the meter keeps you aware of lighting changes as they occur. You need never take your eye from the finder to make the necessary adjustment.

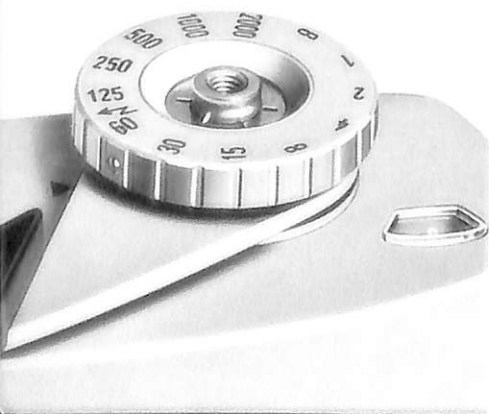
The Leicaflex checks out as a very regal reflex camera — smooth and fast-handling, with a quiet, practically vibration-free mirror/shutter action and the brightest viewfinder of any. After all, it's the only 35mm single-lens reflex camera that's made to the standards of a Leica. Need I say more?

(Only that the price of the Leicaflex, with its superb 50mm Summicron-R f/2 lens, built-in CdS meter, lens hood, lens cap and Series VI filter adapter ring, is \$585.00 . . . Ed.)

LEICAFLEX FLASH TABLE

⚡ CONTACT (Upper)	Electronic-Flash	B → ⚡ (= 1/100)
	⚡ M2	1 → 1 30
💡 CONTACT (Lower)	💡 XM-1 PF-1 PF-5	1 → 1/125
	💡 5 25 M3	1 → 1/250
	💡 AG-1	1 → 1 60

SPEEDS GO TO 1/2000th sec. Strobe synchs at 1/100th sec.



DIAPHRAGM RING, as well as shutter speed dial, couples to the meter's follower arm.



RAPID REWIND CRANK is built in, and the rewind button is located on bottom plate of Leicaflex.



armchair history | *Frances Bacharach*

TV offers news photos

Do you shoot the baby's birthday, the office party, home-town events? You can record news-making world events with even less trouble. History becomes personalized — almost as though you had been there — as famous faces and headline events look up from your developing tray.

The secret of becoming an armchair news photographer is TV. With your Leica set up in front of the screen, neither heat, cold, distance, nor police barricades prevent your taking meaningful records of the events that make history.

My comparatively small collection includes principally current history, and also personages of interest and my favorite entertainment, the dance. I have tried to shoot from a theatre seat, but either frames would be very fractionally filled or I would be forbidden to use the camera. From TV, I have caught the suspended climax of a leap, thrilling despite the evidence of scanning lines.

photographing the TV screen

Your TV set will show, as a frame for the picture, if you wish to make use of it. Corners are inevitably curved, edges distorted and enlargements suffer from contrast and screen lines. But if you accept and present such pictures as livingroom history, these evidences need not be too objectionable. If you prefer, you can snap when the interest is centered, as in close-ups, and crop out the edges and set.

There's no one best way for all conditions, but my results went from bad to reasonably good when I settled on the following technique for TV:

- Dim, but do not black out the room. Eliminate glare spots or reflections on the screen.
- Adjust your TV picture for maximum clarity, *not* maximum brightness. Usually definition is best at the same setting.
- Plus X is my standard film. Faster film seems to require more processing care for equal quality enlargements.
- The 50mm Summicron f 2 lens, without attachments, seems just right for me. A wider angle

would increase the difficulties of filling the film frame and a long focus lens would be more sensitive to motion.

- Distance and focus need be determined only once. I use the closest normal focusing distance, $3\frac{1}{2}'$. Depth of field is not a consideration; for practical purposes only one plane is involved. But take care that the lens is parallel to the plane of the screen.
- With one position, plane and setting, there is tremendous advantage in the use of a tripod and a cable release for those quick snatches at appealing or important moments.

My setting is f/2 at 1/25 (1/30). For TV this is fortunate, since 1/25 or 1/30 sec. synchronizes best with the rate of scanning. I have also heard other apertures recommended. Studied experimentation will evolve the best one for your particular set and reception.

processing

If you have a darkroom, you can have the added thrill of seeing the famous appear through the gentle swells of your developer. Process for moderately "soft" results — both negative and positive. Minimize the scanning lines as you would wrinkles in the portrait of a woman — by the sundry softening steps possible from developing the negative through drying the finished print.

My procedure was chosen with a bit of compromise for gray details. My negatives are developed in Microdol-X, 1:3 75°F, 11 minutes (temperature control is important). I use semi-matte paper grade 1 or 2 unless the picture is to be reproduced. I expose the prints for development in Dektol 1:2 for 60 seconds. (A dilution of 1:2½ helped when an extremely hard negative had important mid-tones.)

If you conclude that there is nothing difficult or even startling in the approach and procedure, you are right! The main challenge is to your imagination and sense of timing and of history. The pictures you make will be rewarding far beyond the time and small effort it takes to make them.



six steps to quality negatives | C. B. Nieberding

simplicity, consistency bring results

Recently, I received a letter from a reader of my previous articles who said, "I have a Leica M3 and a good enlarger, but I don't get the results you do, so please tell me what developer and paper you use. . . ." His words sum up what many 35mm users experience in black and white photography: they own good equipment, but get poor results.

I can guess his troubles. His prints are consistently either too contrasty or too flat, and they either lack good sharpness or are too grainy. These faults seem to bother many 35mm photographers, and they are never solved by any given developer or paper because they are usually caused by shortcomings in darkroom technique or equipment.

Rather than outline all of the causes of these faults, I prefer to give you six simple but essential steps to attain quality in 35mm negatives. These will, of course, also hold true for larger negatives. Shortcomings in technique are not confined to 35mm users!

exposure

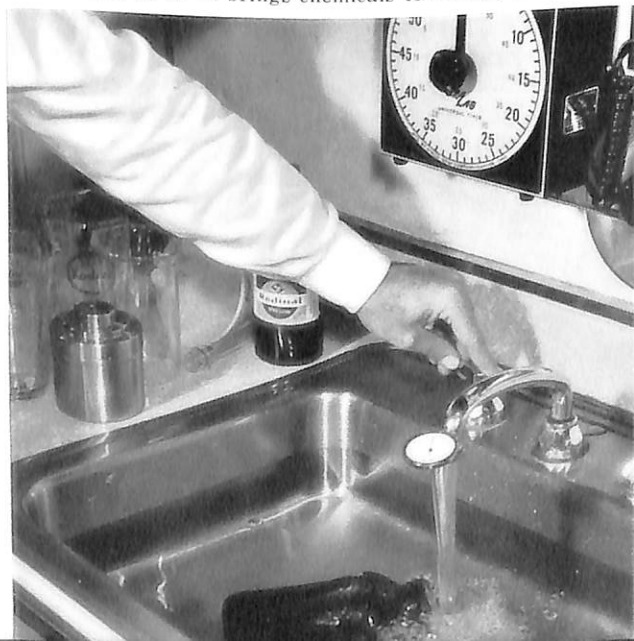
For optimum quality in 35mm b/w negatives, there is only one correct exposure in relation to development times, regardless of what you hear or read about "latitude" in today's emulsions. Even slight overexposure can cause some quality deterioration in the negative. It causes graininess to become more pronounced and it kills sharpness.

So, make certain that your meter is accurate. Almost any photo dealer will check it for you. If your color slides consistently have well-saturated colors, you can assume your reading technique is correct. If they seem always light with pastel color, and your meter is accurate, you may be using it incorrectly. Read the meter instructions carefully, and find out what you are doing wrong. (*Shutter accuracy should also be checked if color slides are consistently too light or dark . . . Ed.*)

If your meter and meter-reading techniques are both correct but your black-and-white negatives are still rather dense and contrasty, then you can be pretty sure that you are overdeveloping the negatives. A properly exposed and developed negative should be rather thin and, when you hold it against newsprint in a good light, you should be able to read right through the darkest part of the negative (see illustration).

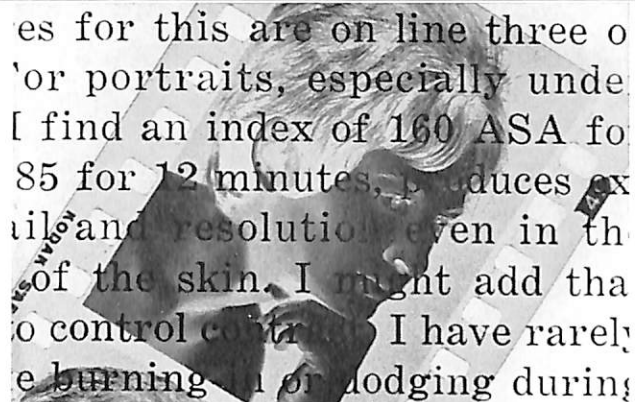
A good 35mm negative will print properly on grade 3 paper rather than grade 2, which is normal for larger size formats. To get this kind of negative consistently, begin by confining yourself *for the next six months* to one film and one developer. Personally, I find Plus-X is a good choice for all-around use. Eliminate as many variables as possible so that any mistakes in your developing technique will be easy to discover and correct.

WATER BATH at 68°F. brings chemicals to correct temperature.



UNIFORM AGITATION is important to getting consistent results.





PRINT can be read through highlights of normal 35mm negative.

the right chemicals

Pick a one-shot developer with a developing period no shorter than six minutes, and preferably 11 to 13 minutes. Short developing times, no matter how convenient, may require you to work faster than your equipment will allow. I can recommend as good developers either FR X-22, Neofin Blue or Red, Rodinal, or even D-76, Microdol X or Acufine diluted as one-shot developers according to their instructions. And, regardless of which one you select, it is important to stick with it for at least six months.

For your other three chemicals, I strongly recommend that you use: Kodak Rapid Fixer, which cuts fixing time down to two or four minutes; Heico's Perma Wash, a clearing agent which reduces washing time from 20 minutes to three; and a wetting agent that eliminates the need for wiping the film. I purposely substitute a water rinse for an acid short-stop. The latter often causes pinholes in the emulsion. The two important chemicals are the rapid fixer and the clearing agent because they reduce the time period when temperatures could run wild, especially during the final wash when changes are most likely to occur and cause change in the grain structure of the negative.

temperature control

Temperature control is the essential key to quality. Get yourself a quick-reacting, dial-type thermometer such as the Weston or Tel-Tru. Don't put the reputation and performance of a fine camera and enlarger at the mercy of a cheap, slow-moving glass thermometer.

Before you begin developing, bring your chemicals and graduates to 68°F. You can do it easily by submerging the bottles and graduates in the sink filled with either warm or cold water, whichever is necessary. Check the progress of the temperature inside a bottle until 68° is reached, then drain your sink and start the tap flowing at 68°.

A good way to control the temperature of the tap flow is to attach your thermometer to the spigot by means of a paper clip or piece of strong wire, bent with a pair of pliers and formed around the spigot to hold the sensitive part of the thermometer stem in the flow. Fill your tank with 68° water to get the

temperature of the film tank and film to 68° to prevent the temperature of the developer from changing when you first pour it in.

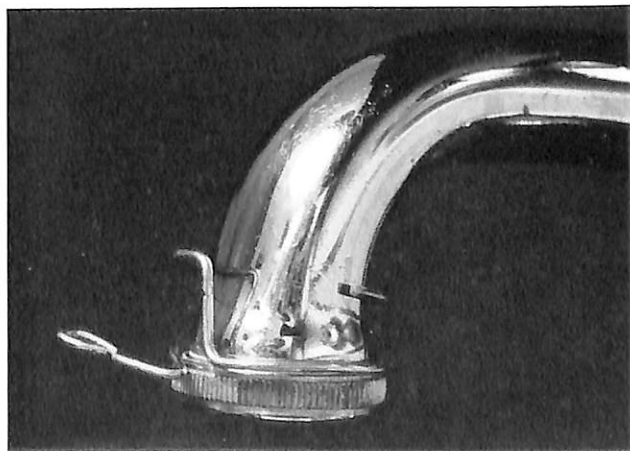
Now mix your one-shot developer with 68° water in one of the graduates and refill the sink with 68° water deep enough to form a water jacket around the two chemical bottles and your film tank. This will prevent the chemicals from warming or cooling due to existing room temperatures during the developing time. If summer weather causes your water to flow warm, then work the entire process at a higher temperature, shortening the processing time accordingly. But remember that the ideal temperature is 68°.

critical processing stage

To begin development, first empty the water from the film tank, start your timer (I recommend one with a sweep second hand) and fill the tank with developer as quickly as it will accept it. After capping the filled tank, agitate immediately for the first ten seconds with six gentle inversions (or turns of the reel if you use a plastic developing tank). If you use a multiple-reel stainless steel tank, use extra, empty reels to fill the tank to avoid excessive movement of the loaded reel during agitation.

Continue agitation by the same method each minute. With three minutes of developing time remaining, you can drain your water basin and start the tap flowing at 68° to prepare for the first rinse. When the development is done, pour out the developer quickly while you make a final check of the tap water temperature. Fill the tank with water, rinse the film for 10 seconds, and get your fixer ready for pouring. Pour out the water and pour in the rapid fixer and fix for two to four minutes, agitating for five sec-

HOLDER for thermometer is easily made from paper clip wire.





CONTACT PRINT, 20X enlargement look equally sharp when negative is properly exposed and processed. Darkroom methods are simple.

onds each 30 seconds. Keep an eye on the temperature of the flowing water and adjust it as necessary to maintain 68°.

When the fixing time is over, pour fixer back into its stock bottle. Remove the lid of the film tank and wash the film for 30-60 seconds in the running water, keeping it flowing fast enough to fill the tank in at least three seconds. Then empty the tank and pour in Perma Wash, bathing the film for 30-60 seconds with constant agitation by turning the reel with your finger. Pour Perma Wash back into its stock bottle and wash the film again for another 30-60 seconds. If the temperature of the running water should ever begin to vary during any rinse or wash period, interrupt the washing step until you have adjusted it back to 68°. The final step is to soak the film for 30 seconds in a 68° solution of wetting agent, tapping the tank sharply to dislodge all air bubbles. Then carefully unwind the wet film from the reel, and with a very firm grip on each end, snap it taut a few times to shake off the excess water.

Hang the film up to dry in a clean place where there is little air circulation that might bring dust. Clean up your developing tanks and containers and you are finished. Cleanliness is extremely important!

evaluating your results

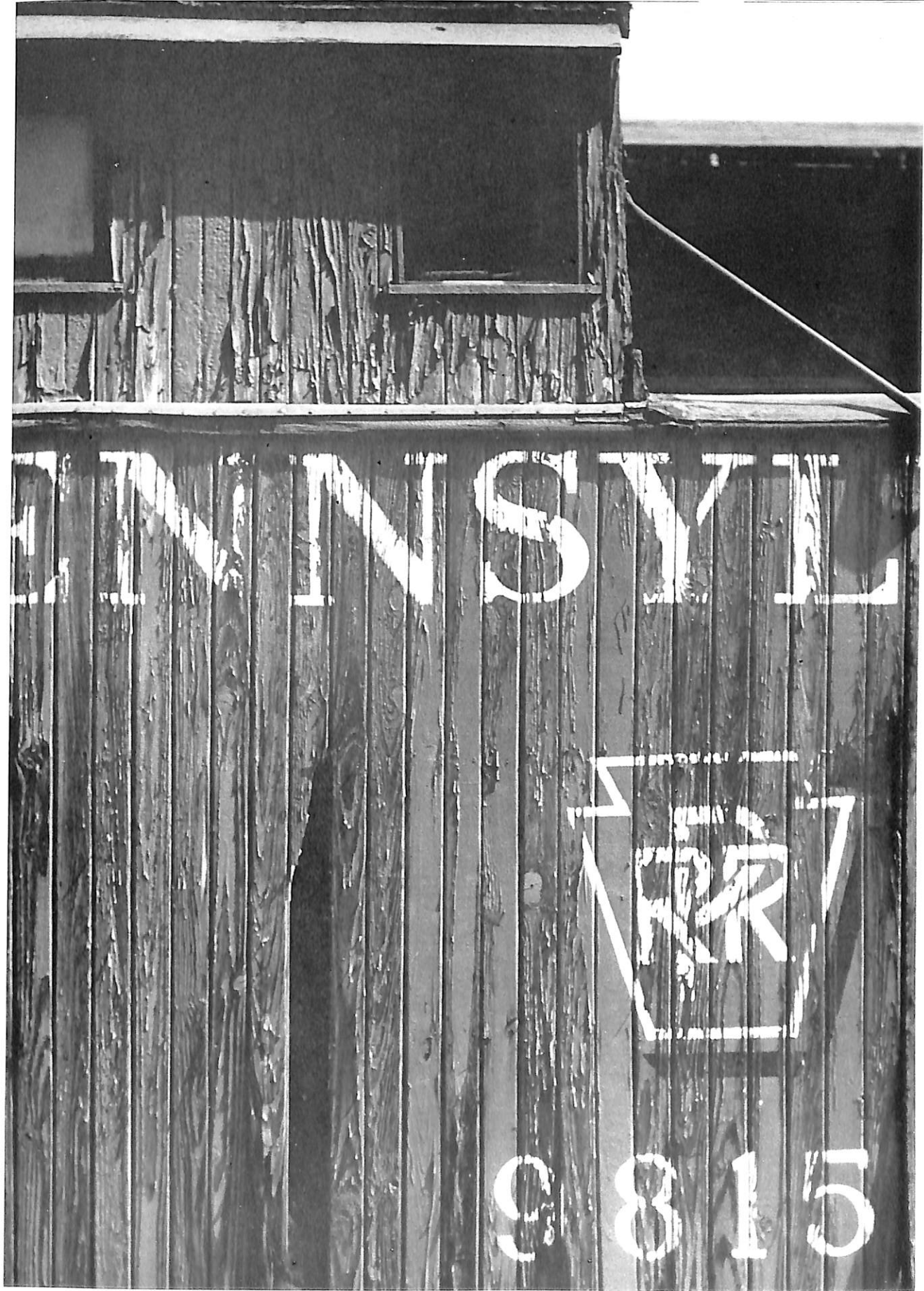
If your first efforts produce negatives which are still dense and contrasty, and you know your exposures were correct, test your next roll with a shorter developing time. Or, if your first negatives are too thin and flat, increase the next developing time by one or two minutes. The developing times listed by manufacturers are only guides and must be adjusted to your individual techniques and equipment.

the enlarger

Many Leica photographers also work with cameras of larger formats, and so use enlargers made to handle various sizes of negatives. These may be fine pieces of equipment, but none are designed specifically with 35mm in mind. They are designed to get maximum quality from the larger negatives and merely accommodate 35mm as an extra feature. What is good for the big negative may be bad for the 35mm negative. By this, I mean that the condenser systems of large-format enlargers are designed without worry about the magnification of graininess, because the maximum enlargements from larger negatives seldom exceed eight diameters. But when a 35mm image is enlarged to 11x14 or 16x20, sharp grain patterns often appear on the print along with specks and spots caused by scratches. Thus, versatility is achieved only at the expense of 35mm quality, and no amount of extreme care in developing can overcome this shortcoming. If you are strictly a Leicaman, investigate the Leitz Valoy II or Focomat Ic enlarger. These enlargers are designed with one purpose: to produce maximum sharpness and quality with a minimum of grain rendition from 35mm negatives. They feature a unique condenser system containing one etched-surface condenser lens which lies flat against the negative. Valoy and Focomat users have little difficulty in achieving 11x14 or larger grain-free prints, even from high-speed film negatives — and without sacrificing sharpness. When used in conjunction with the careful processing techniques outlined previously, the Valoy II or Focomat Ic will give a softer grain pattern from 35mm negatives than would be possible for an enlarger designed specifically for a larger negative format.

PRINT from straight condenser enlarger (left), 20X, shows more graininess, less quality than print from Valoy enlarger on right.





HIGH ACTUANCE. rich detail are characteristic of properly exposed and developed negative. Panatomic-X in Rodinal at 1:75 was used.

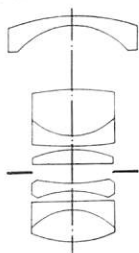
meet the Leicaflex lenses | *Bob Schwalberg*

four new auto-aperture lenses are introduced

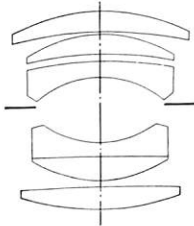
Four completely new lenses specially computed for reflex focusing and viewing start the Leicaflex off with impressive optical capabilities in the most vital wideangle-to-telephoto range. The introductory Leicaflex lens lineup is:



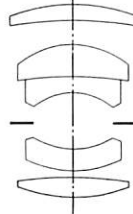
35mm Elmarit-R f/2.8



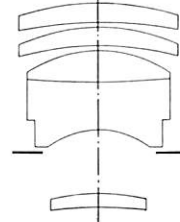
50mm Summicron-R f/2



90mm Elmarit-R f/2.8



135mm Elmarit-R f/2.8



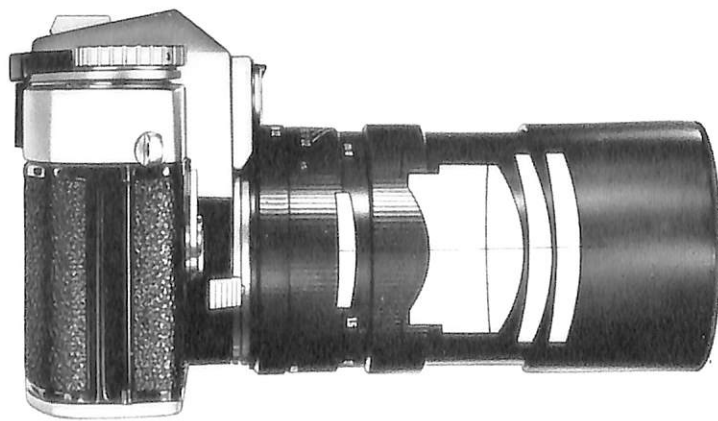
Besides their superb optical correction, and the brilliance of their screen images at full aperture, the four new Leicaflex lenses share more common features than a pod's worth of peas. All have fully automatic spring-back apertures, and all couple automatically to the built-in Leicaflex meter. Issued in handsome, anodized, light-weight aluminum-alloy mounts with parallel (non-rotary) focusing movement, all have their focusing rings at the front, and their auto-aperture rings at the rear, right next

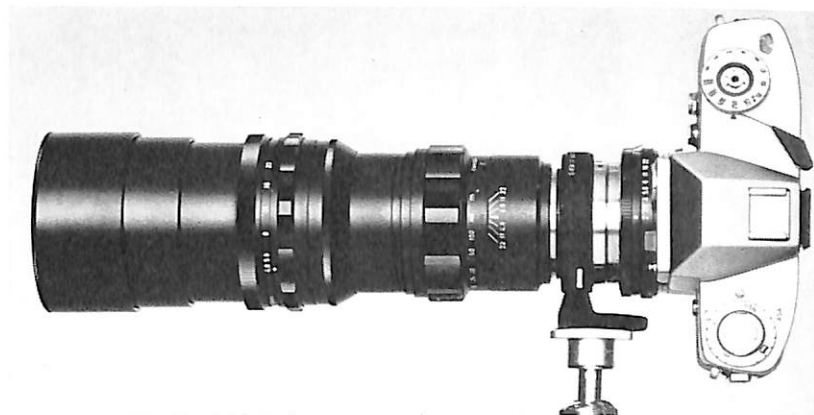
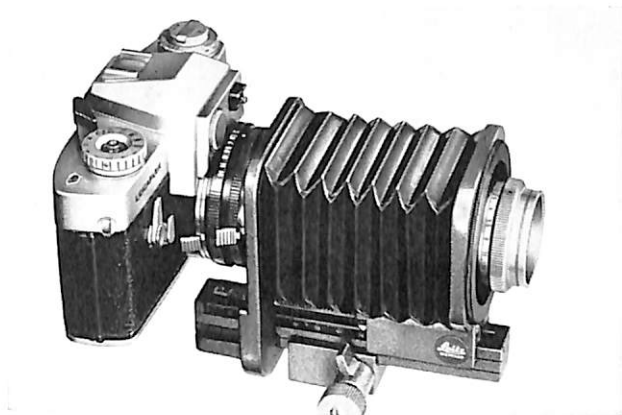
to the camera body. All are click-stopped at each aperture and half-aperture value. The wide separation between focusing and aperture rings on each lens simplifies camera handling and speeds up shooting by preventing the error of grabbing the wrong ring at the wrong time.

All are supplied with retaining rings for standard Series filters. Leitz will supply the normal types for black-and-white, as well as a clear colorless ultra-violet absorbing (UVa) filter and polarizing filters.

LENSES have auto-aperture ring at back, focusing ring at front.

FOCAL LENGTHS from 35mm to 135 mm (shown) are available.





ADAPTER (available soon) will permit the Bellows II as well as lenses designed for use on the Visoflex to be used on the Leicaflex.

Special filters for color photography are supplied by the film manufacturers. The 35- and 50mm lenses take Series VI filters; the 90- and 135mm lenses are for Series VII.

The 35mm Elmarit-R and 50mm Summicron-R use the same clamp-on reversible lenshood, while the 90- and 135mm Elmarit-R lenses boast their own built-on telescoping hoods.

All have combined feet/meter scales, with foot-age calibrations in red, meters in white. Readily legible aperture and depth-of-field engravings are also in white.

The 50mm Summicron-R is a 6-element, 5-group Gauss type with apertures to $f/16$, and a diagonal field of 45° . The unaided focusing range extends down to 20", giving a minimum field of approximately 8 x 12 inches with a 1:8 reproduction ratio.

The wideangle, 64° , 35mm Elmarit-R $f/2.8$ is a retrofocus design using 7 elements in 5 groups. Apertures range down to $f/22$, and the unaided close-focusing distance is 12". At this distance it covers a field of about 7 x 10 inches.

The 90- and 135mm Elmarit-R $f/2.8$ lenses are 5-element, 3-group telephotos with apertures to $f/22$. Fields of view are, respectively, 27° and 18° . The 90mm Elmarit-R has an unaided close-focusing distance of 28", giving a reproduction ratio of a bit more than 1:6, that covers a field somewhat smaller than 6 x 9 inches. The close-in distance of the 135mm Elmarit-R is five feet, giving a reproduction ratio of about 1:9, covering a field of about 9 x 13 inches. Actually, the close-in figures quoted here are the

last engraved scale values and all lenses pass this limit to give a slightly higher reproduction ratio.

Additional close-focusing possibilities for the 50-, 90-, and 135mm Leicaflex lenses are afforded by the new ELPRO 2-element achromatic near-distance lenses (to be available soon) which give maximum reproduction ratios of about 1:3, permitting these lenses to fill the field, with a 3 x 4.5" subject. In the future, a specially designed focusing bellows for the Leicaflex will expand the macro possibilities.

Leica-Leicaflex adapter

In the near future, a ring will become available to adapt any Visoflex lens to the Leicaflex.

This Leica-to-Leicaflex adapter will contain an aperture simulator ring which will couple to the follower arm used in setting exposures with the camera's built-in exposure meter. It is used in the same way as the aperture selector ring on the Leicaflex lenses. However, after setting, the aperture is read off the simulator ring and transferred manually to the diaphragm ring of the Leica lens. The Leica-to-Leicaflex adapter can also be used to mount the Bellows II on the Leicaflex.

Leica lenses which require Adapter 16.466 when used on the Visoflex II or III will also require this adapter in addition to the new Leica-to-Leicaflex ring when used on the Leicaflex.

Prices of the Leicaflex lenses are: 35mm Elmarit-R $f/2.8$, \$219.00; 50mm Summicron-R $f/2$, \$177.00; 90mm Elmarit-R $f/2.8$, \$246.00 and 135mm Elmarit-R $f/2.8$, \$264.00.

Focal Length	Finder Magnification	Lens	No. of Elements	Aperture Max.	Aperture Min.	Angle	Lens Type	Auto-Aperture Diaphragm	Filter Designation	Weight with Hood	Minimum Focus	Approx. Min. Focus Area
35mm	0.6 X	Elmarit-R	7	$f/2.8$	$f/22$	64°	Retrofocus	Yes, incl. $\frac{1}{2}$ stops	Series VI	13.8 Ozs.	12"	7" x 10"
50mm	0.9 X	Summicron-R	6	$f/2$	$f/16$	45°	Normal-focus	Yes, incl. $\frac{1}{2}$ stops	Series VI	11.6 Ozs.	20"	8" x 12"
90mm	1.5 X	Elmarit-R	5	$f/2.8$	$f/22$	27°	Telephoto	Yes, incl. $\frac{1}{2}$ stops	Series VII	17.3 Ozs.	28"	6 x 9
135mm	2.3 X	Elmarit-R	5	$f/2.8$	$f/22$	18°	Telephoto	Yes, incl. $\frac{1}{2}$ stops	Series VII	22.5 Ozs.	5'	9" x 13"

my Leica pays off / *Saunders Harris*

it's a great selling tool

An old businessman's adage says, "Business and pleasure don't mix." Well, forget it! If your particular pleasure is Leica photography you will be surprised how well it mixes with your business, no matter what that business might be.

I have been in the textile business for twenty years and an avid Leica amateur for the past five years. During that time I have criss-crossed the country hundreds of times on business trips. My Leica went with me, but remained retired during the working day. After all, how would it look taking pictures on company time? Then one day . . .

This particular customer (I won't mention his name since he is now a Leica fan and might not want to know how he was conned by a camera) was a tough one. He'd looked at my line but had never given me an order. Over a year's worth of sales calls and the result was zero. Potentially the account was

great, but I couldn't crack this fellow and the frustration was growing. Then I had a wild idea. Having nothing to lose, the next time I called on him with an M-3 in my hand instead of a sample case.

"Sorry," he said, "can't give you any time today. I'm very . . ." He looked up, right into the eye of a 50mm Summicron.

Click.

"Don't worry, Jack," I answered bending over his desk for a better angle, "I didn't come to sell you anything. Just playing this trip."

Click.

The next thing I saw through the rangefinder was my now-not-so-tough buyer taking his glasses off and posing — very slyly, of course — just as if he had been chosen for a Fortune profile story. He asked about the Leica and had all the time in the world to talk about cameras and have his picture taken.

SALE-DAYS SCENE delighted owner of this Texas store.





STORE OWNER Ray Kaplan was caught in action by author.

ACTION PORTRAIT has appeal beyond its good-will use.





BUSINESS AS USUAL provides some of Harris' best shots.

response

Did my scheme work? The following week I mailed him some 8x10's and received a prompt thank you letter with a request for a few extra prints (if it wasn't too much trouble). On my next visit with him the welcome mat was out. And so was the order book.

This was the start. Through experience I have most happily learned that a Leica under my jacket is the greatest selling tool ever invented.

In New Orleans, for instance, in one of the largest department stores in the South, I found myself standing on a counter taking pictures of customers rushing into the store on a sale day. The man busily telling me what to shoot just happened to be a vice-president of the store and a fellow Leica enthusiast. He had seen me taking pictures in the fabric department and, recognizing the M-3, had stopped by to join the fun. Needless to say, my relations with that particular customer went up 100% when I mailed the V.P. prints of that morning's shooting.

technique

Over the past few years, I have settled on Plus-X rated at 250 ASA and Hyfinol-L as my standard film/developer combination. Most store lighting permits an exposure of f/2.8 at 1/60th with fine results. My

traveling Leica kit is an M-3 with a 50mm Summicron hanging from the shoulder on a "Schwalberg" strap, a 90mm Elmarit and a 35mm Summaron. About 90% of the work is done with a 50mm lens.

Experience has taught me that it pays to follow a few self-imposed rules when you use your Leica during business hours.

1. If an individual obviously isn't joining in the fun and doesn't want his picture taken . . . don't take it. Put the camera away and get back to business fast.

2. Be casual about your picture taking. Make the camera seem a natural part of your equipment. People will accept it as such.

3. Send pictures when you take them. 8x10's are the best size and you'll be surprised at how many of them will be framed and hanging on the office wall for your next visit.

An added plus in your working hour photography is the possibility that your pictures of trade personalities, stores or displays may be of interest to trade paper editors. If so, *get the subject's permission to use the pictures and a model release*. What better recognition can you have both for your business and your hobby than a by-line in the trade press?

Can your Leica pay off in business? You bet it can and you'll have a great time proving it.



Leica photos by Thor Holstrom

the silent side of a Leica

Serious photographers who must work unnoticed rely on Leica because they know its shutter's quiet operation will never disturb history (family or world) while they record it. Because Leicas remain inconspicuous, Leicamen can go silently about their business recording important events on film.

Just as important, they trust Leica's unusual reliability. They know its precise mechanism is designed to work under the most demanding conditions.

See for yourself. Visit a Franchised Leica Dealer. Examine the Leica carefully, try it and listen to how Leicas have served photographers for 40 years... quietly.

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 Distributors of Leica cameras, lenses, projectors, microscopes
 in the U.S.A. and Canada. Leica is a registered trademark of Leitz & Co. in Germany, France, Italy, Canada and
 LEICA AND LEICINA CAMERAS LENSES PROJECTORS MICROSCOPES



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meet the **LEICAFLEX**

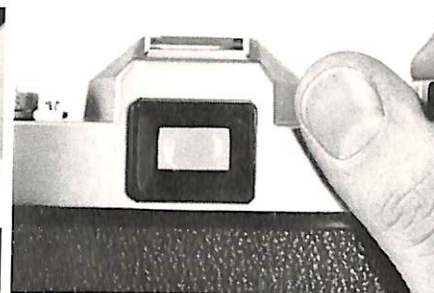
the new standard in 35mm reflex cameras
the only one that's built like a Leica



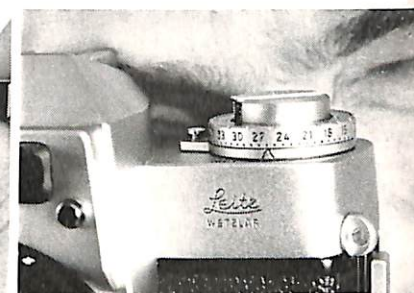
good and solid



fast shutter... 1/2000th



viewing's bright



even a meter



reversible shade



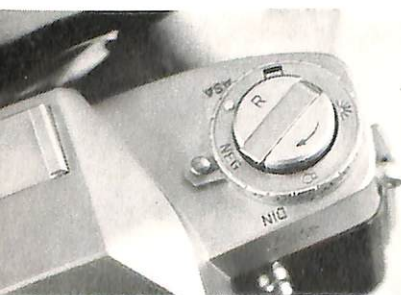
makes rewinding fast



smooth, too



hardly hear the shutter



can wear my glasses



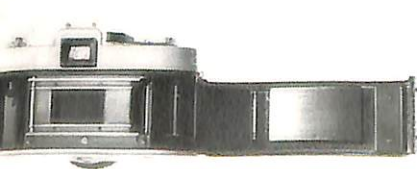
this mount will never wear out



self timer, mirror control —
all the details!



think I'll try it



that was easy



got it



the real reflex, Leicaflex!